

Remarks

Currently, claims 1-3, 5-9, 19-21, and 23-25 remain pending in the present application, including independent claims 1, 19, and 23.

In the Office Action, the amendments filed on April 26, 2005 were objected to as adding new matter to the specification. Also, several of the claims were rejected under 35 U.S.C. § 112.

First, the Office Action objects to the Amendment filed April 28, 2005, stating that it introduces new matter to the disclosure. The Office Action states that the new material which is not supported by the original disclosure is as follows: A first wicking layer and a second retention layer bonded with a bonding agent comprising polyhydroxyalkanoate and having an absorbent capacity at 15 cm of at least about 5 grams per liquid per gram of second retention layer. However, Applicants respectfully disagree with this objection. Applicants respectfully submit that the use of a bonding agent comprising polyhydroxyalkanoate is disclosed throughout the application. See e.g., abstract, Page 4, lines 7-28; Page 10, lines 18-21; and Page 12, lines 3-24.

Second, the Office Action states that the specification does not reasonably provide enablement for measuring other types of wettable cellulosic lamellae and retention layer combinations, other than a composite having a wicking layer of uncreped through air dried combined with a superabsorbent layer. Applicants respectfully disagree with this rejection. In the present specification, the first wicking layer is discussed in detail beginning on Page 17, line 4 - Page 23, line 7, as well as various other portions of the specification. For example, the present specification teaches that in one embodiment the first wicking layers of the present invention are prepared by a wet laying process. The wet laying process provides a first wicking layer which exhibits sufficient dry and wet tensile strengths. Page 22, lines 5-8. Also, by using wet strength resins, binder fibers, or by the careful selection of fibers used to prepare the first wicking layer, an air laid first wicking layer is prepared that exhibits the properties preferred in the present invention. Page 22, lines 10-14. Given that an air laid wicking layer is not wet when formed, the layer is not dried, let alone through air dried.

The specification indicates that the process used to prepare the first wicking layer is preferably an uncreped, through air dried process. Page 22, lines 16-17. Furthermore, this specification discloses that a wide variety of fibers can be employed in the preparation of the first wicking layer. See, e.g., Page 35, line 11 - Page 42, line 18.

Also, the specification discusses in detail the retention layers from Page 33, line 25 - Page 35, line 10, as well as in other various areas of the specification. Applicants respectfully submit that these detailed discussions, along with the more general discussion on Page 12, line 3 - Page 13, line 29, enable one of ordinary skill in the art to make and use the invention within the scope of the claims.

Third, the Office Action states that no test or method has been disclosed with regard to measuring saturation capacity in terms of grams per gram. Applicants respectfully submit that the term "saturated capacity" and methods of testing for saturated capacity are well known to those skilled in the art at the time of the filing of the application. As evidence, Applicants cite two exemplary U.S. Patent references,¹ each teaching methods of testing saturated capacity in terms of grams of a liquid per grams absorbent material. Both patents describe a standard method of determining the saturated capacity by measuring the amount of liquid, such as saline, absorbed and retained by an absorbent material when the absorbent is first flooded with the saline, and then allowed to drain.

Fourth, the Office Action states that the absorbent capacity is enabled for measurement of saline solution only, and the specification does not reasonably provide enablement for measuring the absorbent capacity of the broadly claimed liquids. However, Applicants respectfully disagree with this statement. While saline was used as the liquid in the examples of the present application, many other types of liquids could be used according to the same test methods. Applicants respectfully submit that one of ordinary skill in the art would recognize that any liquid can be tested in accordance with the present invention.

Fifth, the Office Action relies on Ex parte Slob, 157 U.S.P.Q. 172, for stating that the claims improperly set forth the physical characteristics desired of the

¹ U.S. Patent Nos. 6,362,389 and 6,469,130.

composite alone rather than the specific composition of the composite in the end product. However, Applicants respectfully submit that the claims contained several limitations of the specific composition of the end product. For example, referring to claim 1, the composite absorbent structure comprises a first wicking layer comprising wettable cellulosic lamellae, a second retention layer comprising a hyrogel forming polymeric material, and a bonding agent. The physical characteristics included in the claims limit and further describe these structural elements of the composite absorbent structure. Thus, Applicants respectfully disagree with the rejection. Furthermore, Applicants point to MPEP § 2164.08 as stating that “in order to provide effective incentives, claims must adequately protect inventors. To demand that the first to disclose shall limit his claims to what he has found will work ... would not serve the constitutional purpose of promoting progress in the useful arts”. As such, Applicants respectfully submit that such a rejection is improper.

Finally, the Office Action states that the claims do not set forth a specific process or materials required to achieve the characteristics, which have an open-ended range of “at least about” and thus the claims could cover any conceivable number greater than 5, as well as any number or future end product. The Office Action concludes that the specification fails to teach how to make and use the claimed invention without undue experimentation or that the scope of the enablement provided to one of ordinary skill in the art is not commensurate with the scope of protection sought by the claims. Applicants respectfully disagree with this conclusion. Throughout the specification, both the saturated capacity and the absorbent capacity is discussed for the composite absorbent structure, as currently claimed. Applicants respectfully submit that one of ordinary skill in the art would be enabled to achieve these properties from the present specification.

Also, claims 3, 21, and 25 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. However, Applicants respectfully submit that the use of a bonding agent comprising polyhydroxyalkanoate is disclosed throughout the application. See, e.g., abstract, Page 4, lines 7-28; Page 10, lines 18-21; and Page 12, lines 3-24. The Office Action correctly notes that no example is included in the specification with a

polyhydroxyalkanoate. However, according MPEP § 2164.02, compliance with enablement requirement does not turn on whether an example is disclosed. The specification need not contain an example if the invention is otherwise disclosed in such a manner that one skilled in the art would be able to practice it without undue amount of experimentation. As such, Applicants respectfully submit that one of ordinary skill in the art would be able to practice the embodiment where a bonding agent comprising a polyhydroxyalkanoate is utilized.

Should the Examiner have any further questions or concerns concerning the objections or rejections under 35 U.S.C. § 112, she is invited and encouraged to contact the undersigned at her convenience.

Also in the Office Action, claims 1-3, 5-9, 19-21, and 23-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,843,852 issued to Dutkiewicz, et al. in view of U.S. Patent No. 5,286,770 issued to Bastioli, et al., and in further view of U.S. Patent No. 6,365,680 to Edgington, et al. Dutkiewicz, et al. teaches an absorbent structure comprising wettable cellulosic fibers, wherein the absorbent structure exhibits a vertical liquid flux rate value at a height of about 15 cm of at least about 0.002 g of liquid per minute per gram per square meter of absorbent structure per inch of cross-sectional width of the absorbent structure.

As admitted in the Office Action, Dutkiewicz does not disclose a second retention layer comprising a hydrogel-forming polymeric material. The Examiner combines Dutkiewicz with Bastioli to argue that it would be obvious to modify Dutkiewicz to have a retention layer comprising hydrogel-forming polymeric material.

However, claims 1, 19, and 23 also require a bonding agent for bonding said first wicking layer to said second retention layer. The Office Action cites Bastioli, column 9, rows 20-25 as disclosing a bonding agent. However, as described in Bastioli, the adhesive is used to join the topsheet and the backsheet together, wherein both the topsheet and backsheet are made from a hydrophobic material. See Bastioli, column 8, rows 60-62 and rows 38-40, respectively. Bastioli teaches that the topsheet and the backsheet are joined together effectively enclosing the absorbent material within, not bond the absorbent material to either sheet.

In stark contrast, independent claims 1, 19, and 23 require that the bonding agent bond the first wicking layer to the second retention layer. Thus, Bastioli does not disclose or suggest bonding the first wicking layer to the second wicking layer as in the present invention.

In fact, the Office Action admits that the combination of Dutkiewicz and Bastioli do not disclose a bonding agent bonding the wicking layer to a second retention layer. The Office Action combines the teachings of Edgington, et al., to state that it would have been obvious to one having ordinary skill in the art to modify Dutkiewicz and Bastioli to have a bonding agent bond the wicking layer and retention layer for the benefit of providing a biodegradable article. However, Applicants respectfully submit that Edgington fails to overcome the deficiencies of the combination of Dutkiewicz and Bastioli. Edgington only broadly discloses that the adhesives can be applied in the construction of disposable articles. Column 1, lines 17-20. However, like Bastioli, Edgington fails to disclose or suggest that the bonding agent bonds the first wicking layer to the second retention layer. Therefore, Applicants respectfully submit that independent claims 1, 19, and 23 are patentably distinct over the cited references and are in complete condition for allowance.

Also, in the Office Action, claims 3, 12, 21, and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Dutkiewicz and Bastioli and Edgington in further view of U.S. Patent No. 5,685,756 issued to Noda. As admitted in the office action, neither Dutkiewicz nor Bastioli disclose or suggest the use of a bonding agent to bond the first wicking layer to the second retention layer. Thus, it would not have been obvious to one of ordinary skill in the art to combine Noda to find a suitable bonding agent.

Applicants respectfully submit that the presently pending claims are in complete condition for allowance. Therefore, reconsideration and allowance are respectfully requested. Should generic independent claims 1, 19 and 23 be held allowable, then all of the withdrawn nonelected species claims, specifically 4, 22, and 26, should be indicated as allowed also.

Applicants also respectfully submit that for at least the reasons indicated above relating to corresponding independent claims, the pending dependent claims

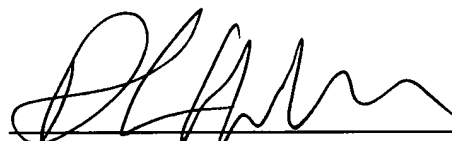
patentably define over the references cited. However, Applicants also note that the patentability of the dependent claims certainly does not hinge on the patentability of independent claims. In particular, it is believed that some or all of these claims may possess features that are independently patentable, regardless of the patentability of the independent claims.

Applicants respectfully request reconsideration and allowance of the present application. However, should Examiner Stephens have any questions or concerns regarding this response, she is invited and encouraged to contact the undersigned at her convenience.

Respectfully submitted,

DORITY & MANNING, P.A.

10/7/05
Date



Alan R. Marshall
Reg. No. 56,405

P.O. Box 1449
Greenville, SC 29602
(864) 271-1592
(864) 233-7342